

equipment in battle situations. Although the TDL message types and formats are defined by a standard, there often exists interpretation differences amongst the various member nations of the North Atlantic Treaty Organization (NATO). Consequently, a conflict often arises when TDL messages are exchanged between military units of the member nations. An example of one possible conflict is the expectation of receiving data representing the speed of an aircraft, but instead receiving latitude data from the aircraft.

Given that each transmitting piece of military equipment transmits about 10 MB of data per hour during a military operation that can last one or more days, the volume of data an operator must sort through to identify and resolve data conflicts requires the use of databases to analyze the data. However, the conversion of the data into a form readable by the database, along with the generation of queries and analysis of the query results to detect data conflicts often takes several days to complete.

The claimed invention addresses the need of providing data analysis of received TDL messages in a more timely manner. Specifically, the present invention is able to assign a TDL message to a specific message group that contains TDL messages of a specific message type. Within each message group the claimed invention tabulates the messages so as to align corresponding data fields and displays the data in tabulated form. In this manner, unusual or spurious data entries are detected in a more timely manner that allow analysis results to be presented as part of a post operation debrief.

Advantageously, the claimed invention may be implemented using commercially available software, such as Microsoft® Excel® or another suitable spreadsheet application. Further, a list of field contents for each data field can be displayed and the list can be filtered to

remove repeat instances of the same content. As such, the claimed invention advantageously allows an operator to detect a conflict by reviewing the content of a selected data field and determining if the list contains the proper data content for the respective data field.

Moreover, new claim 8 provides the advantage of receiving data link messages originating from a multitude of military platforms. Advantageously, the method can be implemented to analyze data link messages across the entire battle theatre.

Further, new claim 9 provides the advantage of analyzing data messages that include a plurality of data fields wherein each data field is associated with a message and the associated content that is dependent of the message type. This advantageously allows the operator to quickly identify data fields holding the inappropriate data content. For example, a message field may contain only numeric data and if textual data appears in the content field the operator is able to recognize a data conflict.

The claims distinguish from the applied art.

The claimed subject matter differs from and is patentably distinct from the applied art. The Examiner rejects claims 1-7 as being obvious over U.S. Patent No. 5,923,846 of Gage, et al., in view of U.S. Patent No. 5,251,324 of McMullan, Jr. Applicant respectfully submits that claims 1-7 are not obviated by the art of record for the reasons set forth below.

U.S. Patent No. 5,923,846 of Gage et al. (hereinafter "Gage"), describes a method for uploading to a server, a message containing a file reference, and for downloading a file, from the server, using the file reference. The method has a particular applicability in a bulletin board

system to allow a bulletin board user to conveniently upload and download files to a publicly accessible location on a computer network. As such, Gage discloses a method for exchanging textual messages that contain embedded objects which retain a link to their associated data file. *See Column 6, lines 60-63.* Gage fails to teach or suggest a method of analyzing data link messages. Moreover, contrary to what the Examiner indicated, Gage fails to teach or disclose the receiving of a plurality of data link messages (such as TDL messages) and assigning each data link message by message type to a message group containing like messages. It appears that the Examiner has interpreted data link messages to refer to the use of a linker program to combine object modules to form an executable program. In fact, the data link message of the claimed invention refers to a communications link or channel over which data is received. As such, claims 1-7 recite a method for analysing data received via a communications link and not the embedding of an object that represents files within the body of a bulletin board service textual message.

Indeed it appears that Gage teaches away from the claimed invention since Gage teaches the use of embedded file objects within a bulletin board service message body to facilitate file retrieval by a bulletin board user. By contrast, a TDL message contains raw data collected by a plethora of sensors and instruments.

U.S. Patent No. 5,251,324 of McMullan, Jr. (hereinafter "McMullan"), describes a method and apparatus for generating and collecting viewing statistics in a cable television system. In this manner, a system manager transmits a record time to a remote cable terminal to indicate a point in time when the terminal is to begin the recording of viewing statistics. The remote cable terminal stores the record times in memory and when the record time matches the current time, the remote cable terminal stores in memory the viewing statistics. Then in response

to a polling signal from the system manager, the cable terminals transmit back to the system manager the recorded viewing statistics with a time code corresponding to the time at which the viewing statistics were recorded. In this manner, the system manager is able to compile the viewing statistics to determine what channel the cable terminal was tuned to at a specific point in time.

The McMullan reference discloses several filters to condition an RF signal. The filters taught and disclosed by McMullan do not relate to a program that accepts a certain type of data as input and transforms it in some manner, and then outputs the transformed data. Moreover, McMullan fails to teach or suggest the tabulation of data messages so as to align corresponding fields nor the display of the tabulated data.

Since Gage teaches away from the claimed invention, Gage fails to provide the necessary teaching, suggestion or motivation to modify or combine with McMullan to render obvious the claimed invention. Moreover, as required by law, there is no reasonable expectation of success of combining the teaching to embed an object into a bulletin board message that links to the application that created the object with a method and apparatus for generating and collecting viewing statistics in a cable television system to make the claimed invention. Lastly, Gage in combination with McMullan fail to teach or suggest all the claimed limitations of the claimed invention.

With regard to the rejection of the dependant claim 2, the Applicant contends that dependant claim 2 is patentable over Gage. Claim 2 depends either directly or indirectly from independent claim 1, and hence the assigning of each data link message to one of a plurality of message groups such that each group contains data link messages of a specific message type.

Accordingly, the Applicant contends that the rejection of claim 2 is improper, and requests allowance of this claim.

With regard to the rejection of the dependant claim 3, the Applicant contends that dependant claim 3 is patentable over Gage. Claim 3 depends either directly or indirectly from independent claim 1, and hence includes the assigning of each data link message to one of a plurality of message groups such that each group contains data link messages of a specific message type. Accordingly, the Applicant contends that the rejection of claim 3 is improper, and requests allowance of this claim.

With regard to the rejection of dependant claim 4, the Applicant contends that dependant claim 4 is patentable over McMullan. Claim 4 depends either directly or indirectly from independent claim 1, and hence includes the assigning of each data link message to one of a plurality of message groups such that each group contains data link messages of a specific message type. Accordingly, the Applicant contends that the rejection of claim 4 is improper, and requests allowance of this claim.

With regard to the rejection of dependant claim 5, the Applicant contends that dependant claim 5 is patentable over Gage. Claim 5 depends either directly or indirectly from independent claim 1, and hence includes the assigning of each data link message to one of a plurality of message groups such that each group contains data link messages of a specific message type. Accordingly, the Applicant contends that the rejection of claim 5 is improper, and requests allowance of this claim.

With regard to the rejection of dependant claim 6, the Applicant contends that dependant claim 4 is patentable over McMullan. Claim 6 depends either directly or indirectly from independent claim 1, and hence includes the assigning of each data link message to one of a plurality of message groups such that each group contains data link messages of a specific message type. Accordingly, the Applicant contends that the rejection of claim 6 is improper, and requests allowance of this claim.

With regard to the rejection of dependant claim 7, the Applicant contends that dependant claim 4 is patentable over McMullan. Claim 7 depends either directly or indirectly from independent claim 1, and hence includes the assigning of each data link message to one of a plurality of message groups such that each group contains data link messages of a specific message type. Accordingly, the Applicant contends that the rejection of claim 7 is improper, and requests allowance of this claim.

New claim 8 provides a method for receiving a plurality of data link message from a plurality of military platforms. As such new claim 8 defines a feature that is neither taught or suggested by Gage or McMullan alone or in combination.

New claim 9 provides a method for receiving a plurality of data link messages that comprise a plurality of data fields where the fields include a message type field and a content field that contains information of a nature that is dependent on the message type. As such, the content of a data field can be limited to numeric data, textual data, by data length or some other type of limitation. As such, Gage or McMullan, alone or in combination, fail to teach or suggest such a feature.

In view of the foregoing distinctions, the prior art of records fails to teach or suggest Applicant's invention. Accordingly, Applicant deems claims 1-9 to recite patentable subject matter. As such, the Examiner's rejections so far as they are based on 35 USC 103 should be reconsidered and withdrawn.

CONCLUSION

Applicant contends that the claims patentably distinguish over the cited art. The art is devoid of facts that render the claimed invention obvious to one of ordinary skill in the art when considering the U.S. Patent of Gage and the U.S. Patent of McMullan. Accordingly, reconsideration and allowance of claims 1-9 are in order and requested. If there are any remaining issues an opportunity for an interview is requested prior to issuance of another Office Action.

Respectfully submitted,

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Date: **June 7, 2001**